

Remarks

Claim 1 is amended and claims 6 to 10 are added. Claims 1 to 10 are pending in this application of which only claims 1 and 6 are in independent form.

Claims 1 to 5 were rejected under 35 USC 112, first paragraph, because the disclosure was deemed to be inadequate and confusing. In his objections, the Examiner makes reference to external pump electrode 10 and applicants respectfully submit that the external pump electrode is identified in FIG. 1 by reference numeral 13. In this connection, reference can be made to page 6, line 11, of the applicants' disclosure. This clarification should no longer cause the disclosure to be inadequate and confusing.

The term "pregivable" is not in the dictionary as noted by the Examiner. Accordingly, claim 1 is amended to delete this word and to substitute -- pregiven -- therefor.

The specification should now satisfy the requirements of 35 USC 112, first paragraph.

Claims 1 to 5 were rejected under 35 USC 112, second paragraph, as being indefinite because the view was expressed that the wording at lines 13 to 20 of claim 1 suggests that the sensor is being positively claimed because the pumping currents are generated from the electrodes and electrolytes thereof. The invention is really a circuit arrangement for operating the sensor and for this reason, the circuit arrangement must operate on the sensor to generate the currents set forth in claim 1. The

circuit arrangement of the invention cannot operate the exhaust-gas probe if it cannot apply voltages thereto to obtain currents therefrom. Accordingly, applicants respectfully submit that claims 1 to 5 should satisfy the requirements of the statute and be definite.

The foregoing notwithstanding, claims 6 to 10 are added to provide another set of definitions of the invention in the form of a combination of the exhaust-gas probe and the circuit arrangement for operating the same.

Claims 1 to 5 were rejected under 35 USC 102(b,e) as being anticipated by or, in the alternative, under 35 USC 103(a) as being obvious over Okazaki et al, Kurokawa et al or Miyata et al. Claims 1 to 5 were also rejected under 35 USC 103(a) as being unpatentable over Sugiyama et al separately in view of each of Okazaki et al, Kurokawa et al and Miyata et al. The following will show that claim 1 patentably distinguishes the invention over these references.

Sugiyama et al discloses at least two voltage sources, namely, voltage source 229 and voltage source 329. There is no switchover via switching means between these two voltage sources. Thus, and in contrast to Sugiyama et al, applicants' claim 1 incorporates the feature and limitation of:

"switching means for switching said
pump voltage generating circuit unit
between respective ones of said pump
electrodes;"

This feature is nowhere suggested in Sugiyama et al. However, the view is expressed in the action that it would have been obvious for Sugiyama et al to adopt the switching means of a

secondary reference because a switch provides multiple voltage sources from a single element. Applicants respectfully submit that this idea must come from the reference itself and not be read into the reference when there is no suggestion which could lead our person of ordinary skill to seek out a switching means. Stated otherwise, there is no suggestion in Sugiyama et al which would send our person of ordinary skill looking to other references to provide the switching means of the applicants' invention.

Okazaki et al shows a sensor for only two connections (reference numerals 30a and 30b). Here, the problem of voltages applied to several pump electrodes is nowhere suggested. The same consideration applies to Kurokawa et al.

From Miyata et al, the person of ordinary skill would likewise receive no suggestion which would lead to providing a pump voltage generating switching unit which can be switched by switching means between respective ones of the individual pump electrodes and which generates all voltages, which are applied to the pump electrodes, in dependence upon the particular reference voltages.

In view of the foregoing, it is not seen how our person of ordinary skill could arrive at the applicants' invention from a study of the applied references exercising only ordinary skill so that claims 1 to 5 should now patentably distinguish the invention thereover.

Reconsideration of the application is respectfully
requested.

Respectfully submitted,



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